

The student makes a microscopical examination of the specimens, writes out notes and makes sketches, and by the aid of monographs, Ellis' sets of fungi, and such other help as he can get, determines the species. The class this semester have already indentified about sixty or seventy species, and as these are selected so as to embrace representatives from the leading groups, considerable knowledge of the subject is gained even in a few weeks' time. Each student is meantime required to prepare an essay on a given subject, which is read and criticized before the close of the semester. One of these subjects given this spring reads: The Uredineæ, their life-history, with special reference to the question of heterœcism, together with an enumeration of the parasitic species that are of economical interest. In preparation for this, the student, to whom it was assigned, read largely and intelligently from de Bary, Schröter, Farlow, Hartig, Ward and other authorities.

By the time the work thus outlined has been accomplished the spring has advanced far enough to enable us to make collections, and an excursion is made every week, resulting in the collection, each time, of from one to six or eight species of parasitic fungi. We are gathering no others at present. Yesterday afternoon we gathered *Synchytrium Anemones*, *Peronospora pygmæa*, *Puccinia fusca*, *Æcidium podophyllum* and *Peronospora Ficariæ*, and examined hosts for others that the class are to keep on the lookout for. The specimens obtained in this way are carried to the laboratory, identified and labeled.

In addition to this, each one in the class is doing a special piece of independent work. One is working out the histology of the common cedar apple, and another is comparing the normal peach leaf with that distorted by the *Ascomyces deformans*. They will spend the rest of the semester on this special work and on the collection and identification of the species gathered in our weekly trips.

There are only two students in this class. The whole number of students pursuing botany at the university this semester is about two hundred, but the course described above is carefully hedged about with requirements, so that none get into it who are not capable of doing thorough work and a good deal of it.—VOLNEY M. SPALDING.

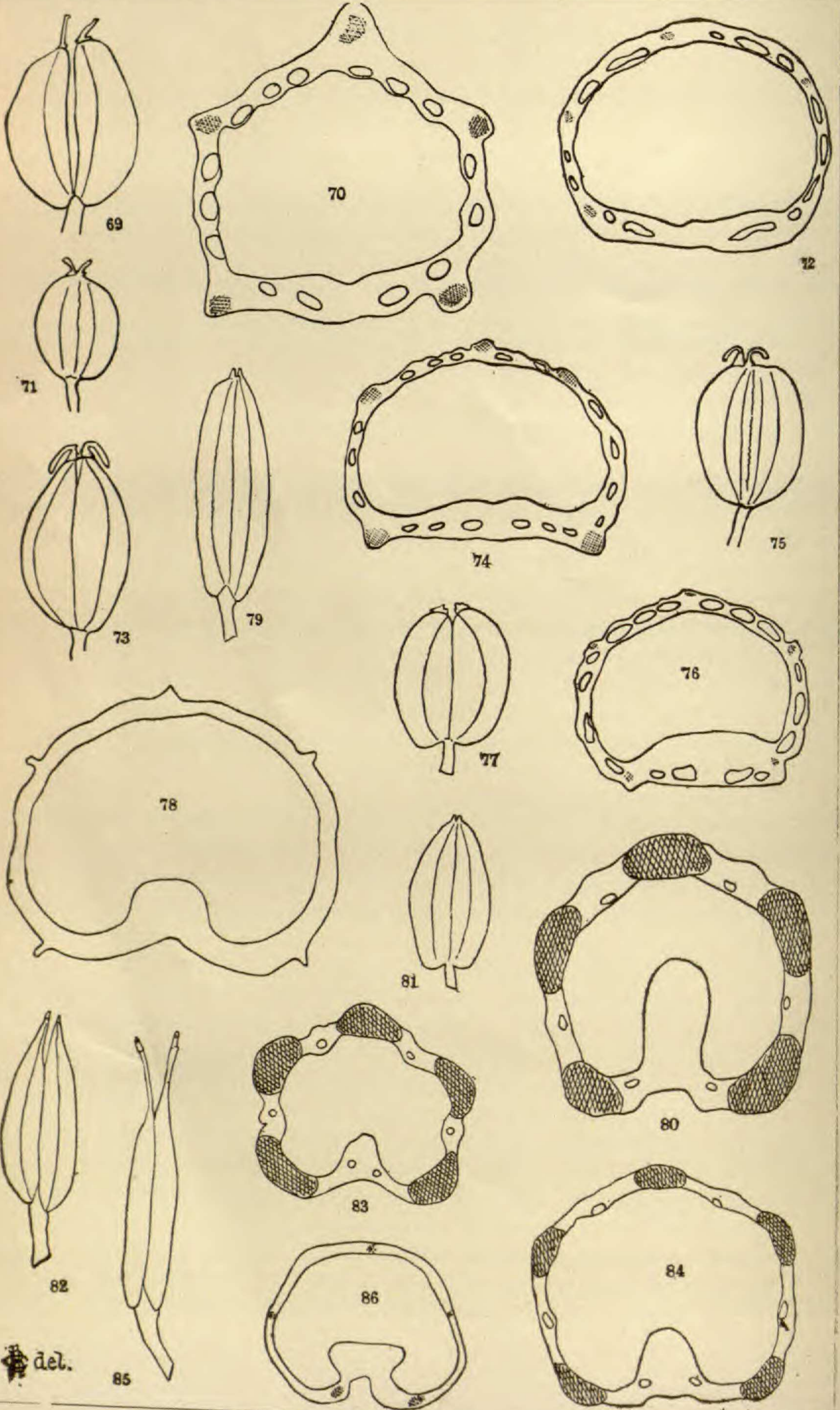
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### EDITORIAL.

IN THE July number of *Popular Science Monthly* Dr. Farlow has a paper entitled "The Task of American Botanists." It is to be expected that such a subject and such an author would supply something both interesting and valuable. It touches upon a point of vital interest with scores of willing workers who are anxiously seeking an answer to the question, "What is there for me to do?" Of course, the question is difficult to answer, but never hopeless. The chief difficulty lies in the re-

restrictions the young botanist has thrown about the answer. He must have something apparently difficult, far-reaching, exhaustive—a great subject in which he is to become an authority. Such answers are impossible, and young botanists searching for some life work must understand that they are trying to begin at the possible end of their life-work rather than at its beginning. Beginnings are always small and the subjects simple, and the botanist can not expect to begin a great work offhand; he must grow into it. The law of development in the ability of the worker and slow accretions in the range of his subjects may eventually work out to an authority and a great subject. The thing to do is the thing that can be done; and it is not only folly, but a waste of time, to sigh over lack of opportunity for great work. Dr. Farlow concludes that advanced systematic work must be done by experts having access to large collections and libraries; that physiological work of high grade can only be done at a few well-equipped laboratories; but that histology and the study of life-histories furnish subjects for every worker, whatever his locality or equipment. It must be understood that we are speaking of advanced and critical work; for every one interested in botany can furnish valuable assistance in systematic work in the way of collections and field notes. Another difficulty may be mentioned, and that is the unselfishness of good work. Patient, laborious work over details, which is the foundation upon which our science must rest, does not bring the public acknowledgment, the fame, which some superficial work may. A fairly good compiler may step at once into a certain kind of prominence, while a far superior botanist may work all his life in comparative obscurity. It needs a philosophic spirit to work patiently under such conditions. But no botanist has ever begun with the simple problems at his hand, and thoroughly mastered them, who was not led into a wider field, and soon found waiting for him more work than he could ever hope to do.

BOTANISTS are to take it for granted that they will be well entertained at New York next August. Apart from the single fact that the Torrey Club is to be responsible nothing has been published; but this perhaps, is enough. The main thing is for the botanists to get together, and their meeting can not help being pleasant and helpful. Heretofore it has been difficult to get time enough at convenient hours for the meetings of the club; for the informality breeds a desire to speak, and the meetings have always been too short. With such a wealth of attractive places for collecting near at hand as New York affords, there will be a great temptation to overdo the excursion business. As we take it, the average botanist does not care to do much collecting upon such an occasion. He can do that at any time, in person or by exchange. What he chiefly wants is to have a sociable time with his fellows, and for this an excursion is a good excuse. The Torrey Club, with wise foresight in this particular, has arranged to distribute prepared specimens to those desir



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